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# Progress in Mathematics of Integrable Systems

edited by Ryogo Hirota and Daisuke Takahashi

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**Research Institute for Mathematical Sciences  
Kyoto University**

*RIMS Kôkyûroku Bessatsu B30*

*Progress in Mathematics of Integrable Systems*

*August 17~19, 2011*

*edited by Ryogo Hirota and Daisuke Takahashi*

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## PREFACE

This volume of RIMS Kôkyûroku Bessatsu is a collection of research and survey articles which were contributed by invited speakers of the RIMS conference “Progress in Mathematics of Integrable Systems”, which was held at the Research Institute for Mathematical Sciences (RIMS) of Kyoto University from August 17 through August 19, 2011.

The aim of the conference was to overview recent developments in integrable systems and related topics. There were given 14 lectures and 88 participants during the conference. It is our pleasure that this volume collects 12 contributions from the speakers.

All papers here have been refereed and are in their final forms. We would like to express our sincere gratitude to all the participants, invited speakers and RIMS secretaries who have made the conference successful and the referees of articles of this volume.

Editors: Ryogo Hirota (Waseda University)  
Daisuke Takahashi (Waseda University)

京都大学数理解析研究所研究集会  
「可積分系数理の進化」  
(Progress in Mathematics of Integrable Systems)  
2011 年 8 月 17 日 (水) ~ 19 日 (金)

プログラム

8 月 17 日 (水)

- 13:00 - 13:50 広田良吾 (早稲田大学)  
ソリトン方程式の可積分性：差分と超離散
- 14:00 - 14:50 野邊厚 (千葉大学)  
トロピカル超楕円曲線の Jacobi 多様体における加法
- 15:10 - 16:00 松浦望 (福岡大学)  
曲線の差分幾何
- 16:10 - 17:00 井ノ口順一 (山形大学)  
曲面の差分幾何

8 月 18 日 (木)

- 10:00 - 10:50 岩尾慎介 (立教大学)  
2 次元周期箱玉系とトロピカル曲線
- 11:00 - 11:50 松尾宇泰 (東京大学)  
構造保存差分スキームについて
- 13:00 - 13:50 太田泰広 (神戸大学)  
差分ソリトン方程式の話題
- 14:00 - 14:50 渡部善隆 (九州大学)  
微分方程式の精度保証付き数値計算
- 15:10 - 16:00 国場敦夫 (東京大学)  
クラスター代数と可積分系 I
- 16:10 - 17:00 井上玲 (千葉大学)  
クラスター代数と可積分系 II

8月19日(金)

10:00 - 10:50 岩尾昌央(早稲田大学)

複比と周期

11:00 - 11:50 鈴木貴雄(大阪府立大学)

ドリinfeldt・ソコロフ階層と高階パウルヴェ方程式

13:00 - 13:50 名古屋創(神戸大学)

量子パウルヴェ系について

14:00 - 14:50 池上貴俊(早稲田大学)

Elementary cellular automaton の初期値問題の max-plus 解析

主催者: 広田良吾(早稲田大学, 代表)

高橋大輔(早稲田大学, 事務担当)

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